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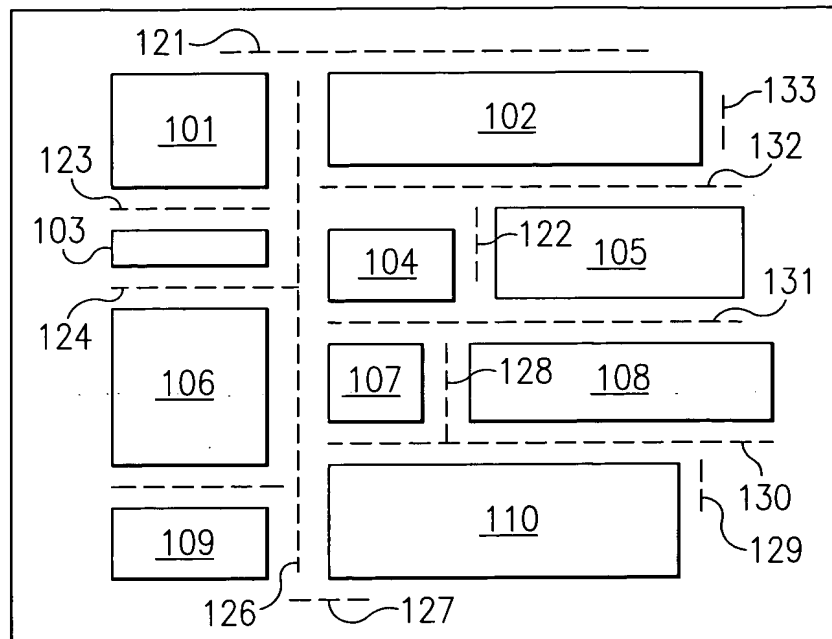


FIG. 1
 (PRIOR ART)

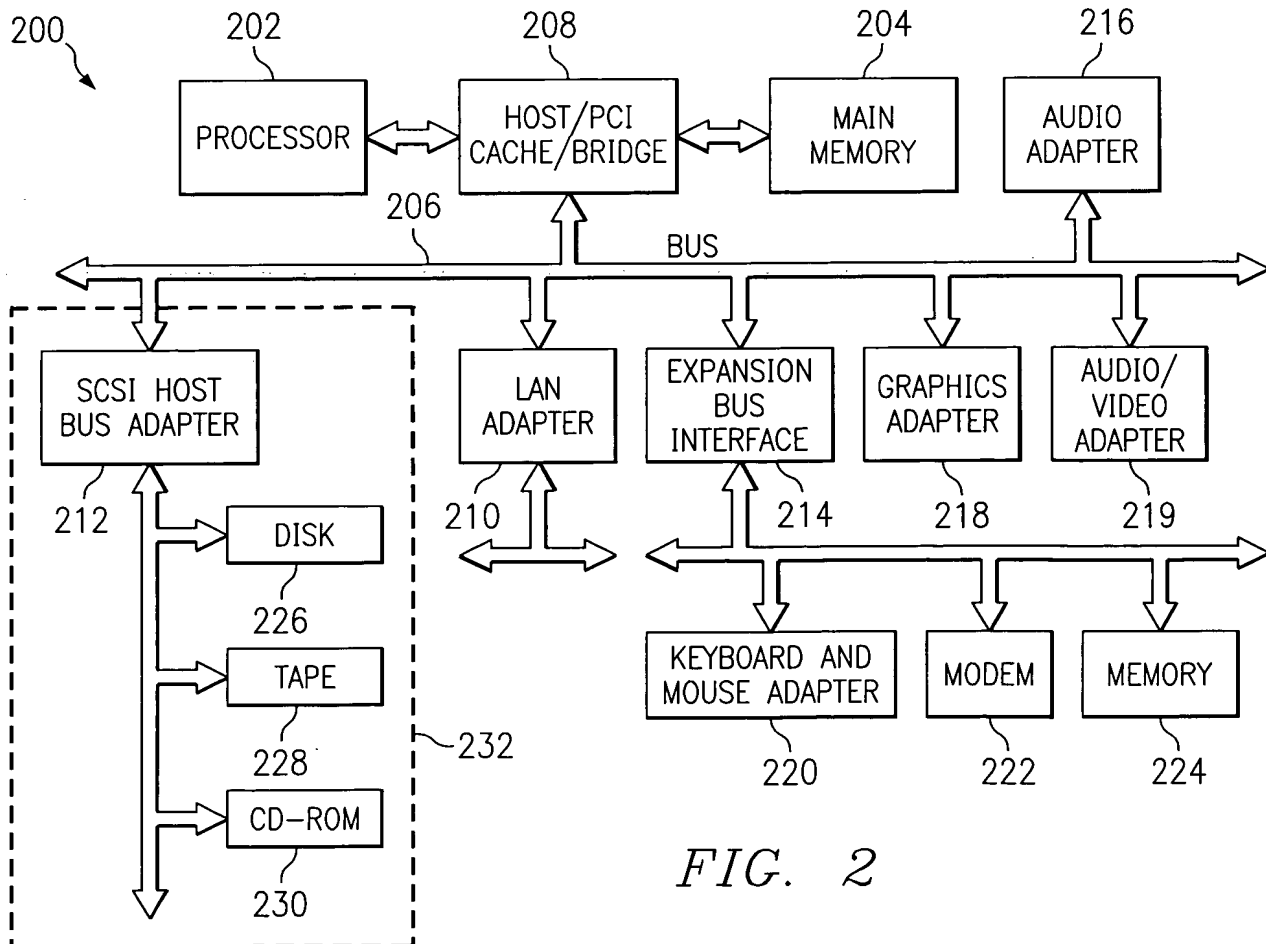


FIG. 2

FIG. 1 (PRIOR ART)

FIG. 3

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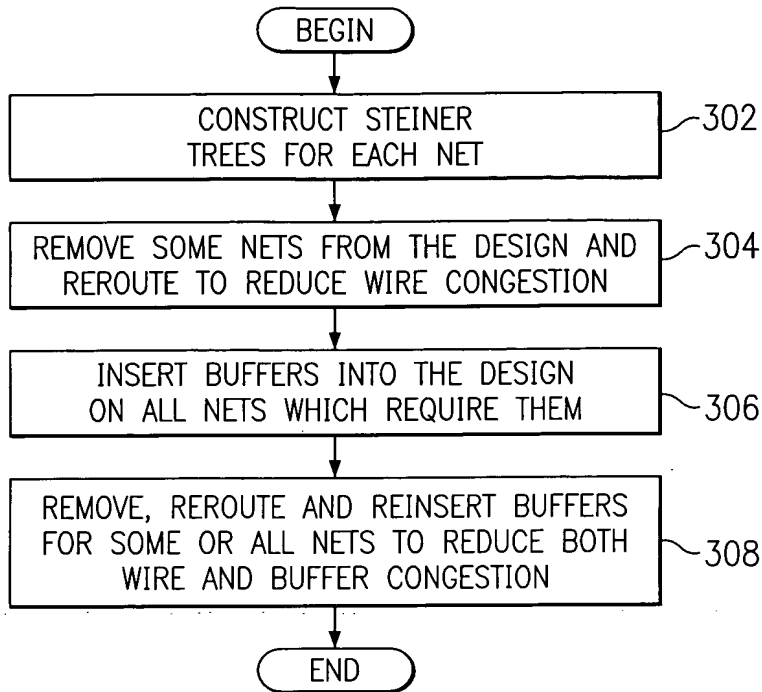
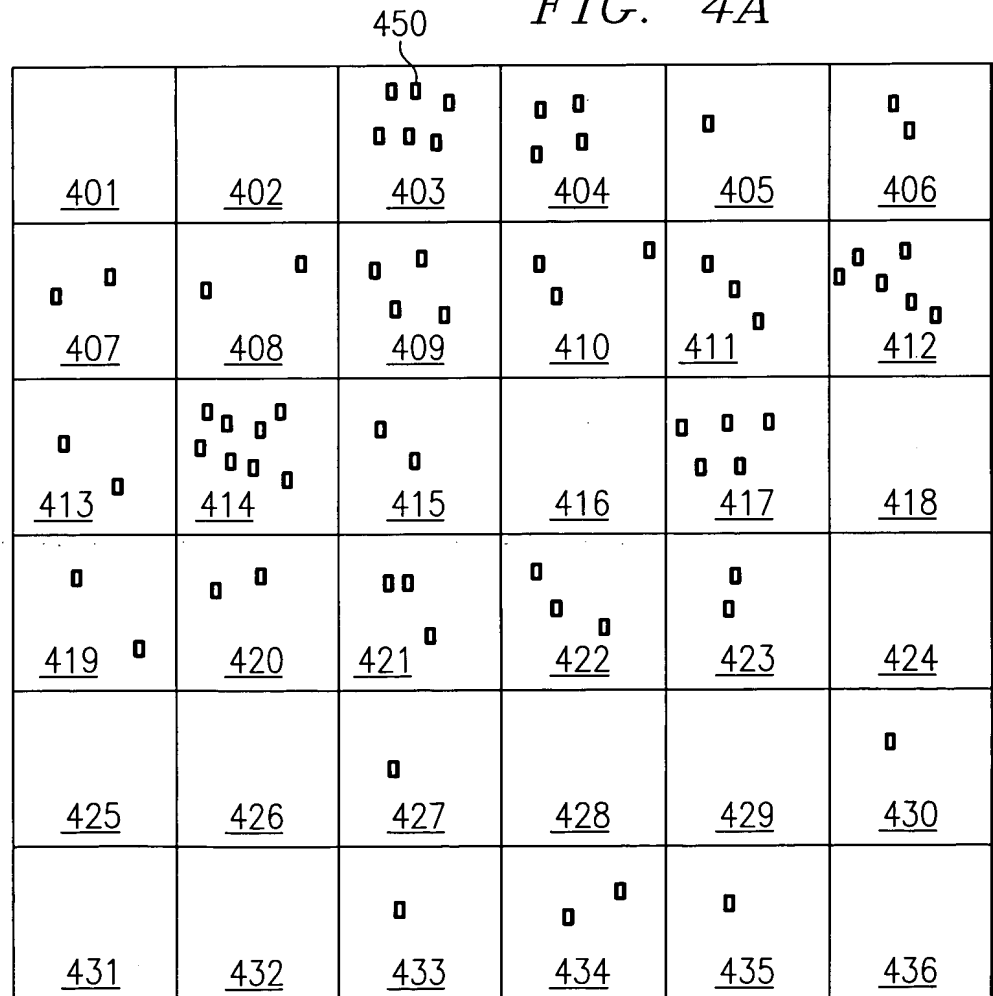


FIG. 4A



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FIG. 4B 3/8

0	0	6	4	1	2
<u>401</u>	<u>402</u>	<u>403</u>	<u>404</u>	<u>405</u>	<u>406</u>
2	2	4	3	3	6
<u>407</u>	<u>408</u>	<u>409</u>	<u>410</u>	<u>411</u>	<u>412</u>
2	8	2	0	5	0
<u>413</u>	<u>414</u>	<u>415</u>	<u>416</u>	<u>417</u>	<u>418</u>
2	2	3	3	2	0
<u>419</u>	<u>420</u>	<u>421</u>	<u>422</u>	<u>423</u>	<u>424</u>
0	0	1	0	0	1
<u>425</u>	<u>426</u>	<u>427</u>	<u>428</u>	<u>429</u>	<u>430</u>
0	0	1	2	1	0
<u>431</u>	<u>432</u>	<u>433</u>	<u>434</u>	<u>435</u>	<u>436</u>

FIG. 5

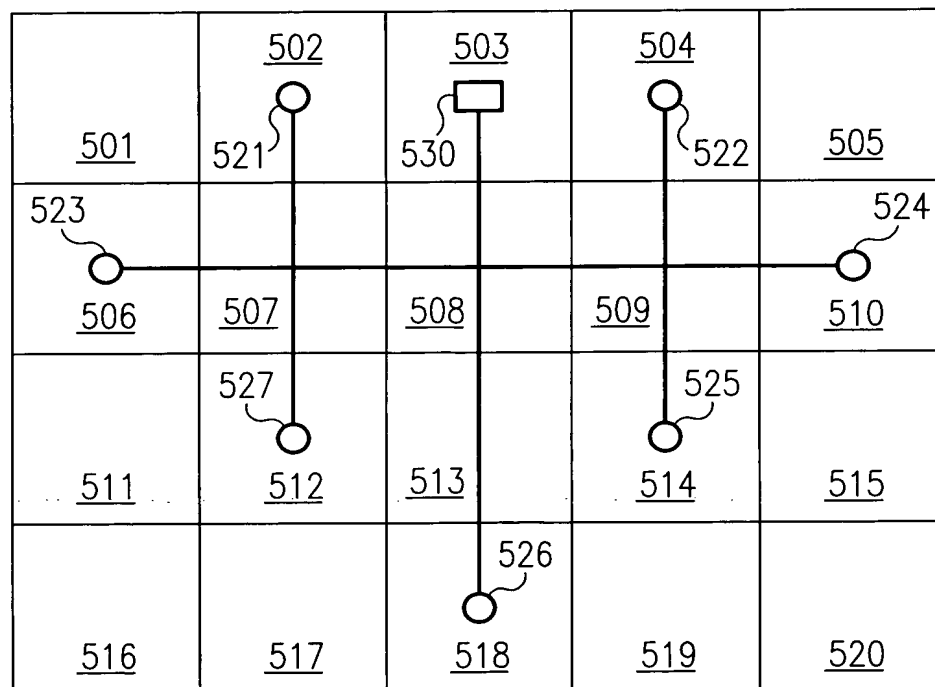


FIG. 6

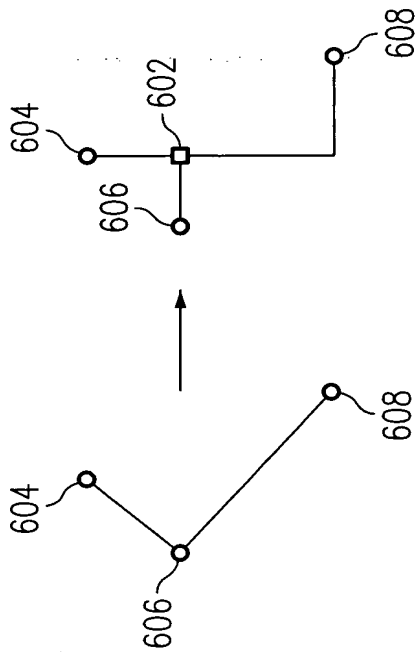


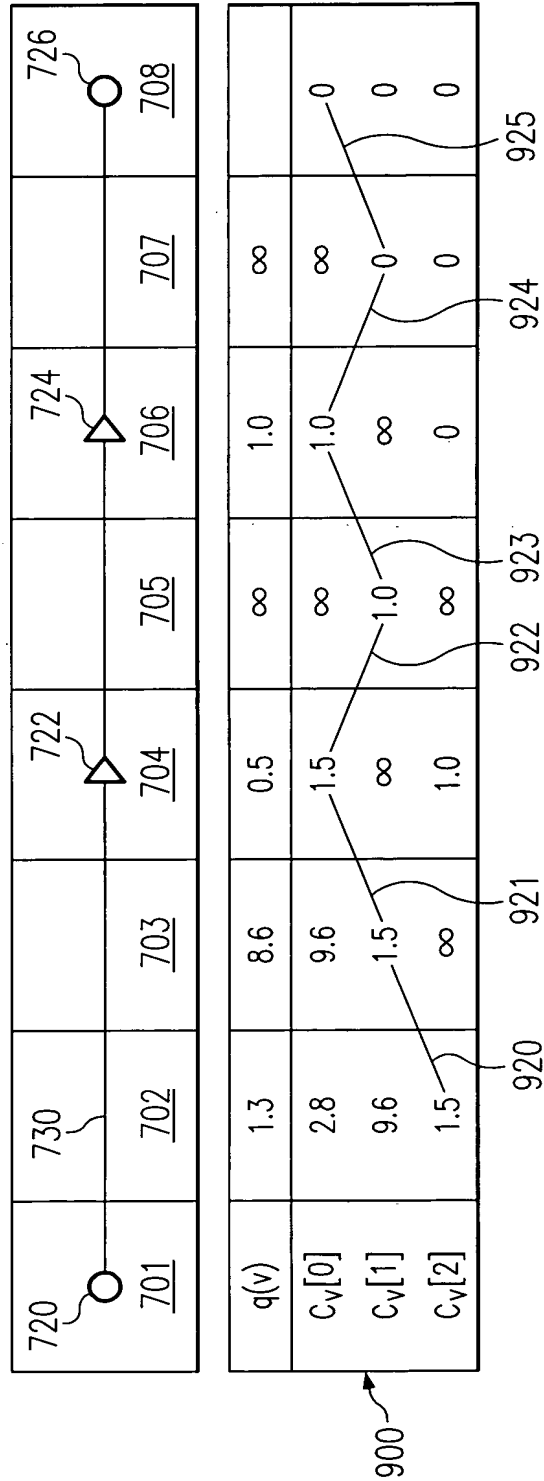
FIG. 8

1. SET $C_t[j] = 0$ FOR $1 \leq j < L_i$ AND SINK t . SET $v = t$
2. WHILE $v \neq s$ DO
 - FOR $j = 1$ TO $L_i - 1$ DO
 - SET $C_{par(v)}[j] = C_v[j - 1]$
 - SET $C_{par(v)}[0] = q(par(v)) + \min\{C_v[j] \mid 0 \leq j < L_i\}$
 - SET $v = par(v)$
3. LET v BE SUCH THAT $par(v) = s$. RETURN $\min\{C_v[j] \mid 0 \leq j < L_i\}$

FIG. 7

720	730		722		724		726
701	702	703	704	705	706	707	708
B(v)	8	5	12	3	5	0	
b(v)	3	4	2	3	0	0	
p(b)	2.5	3.6	2	0.8	4	5	
q(v)	1.3	8.6	0.5	∞	1.0	∞	

FIG. 9



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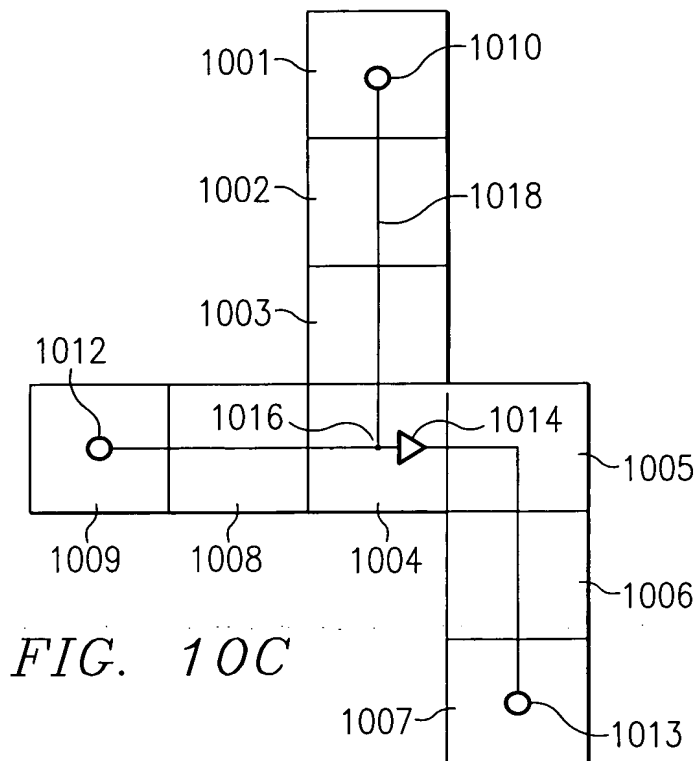
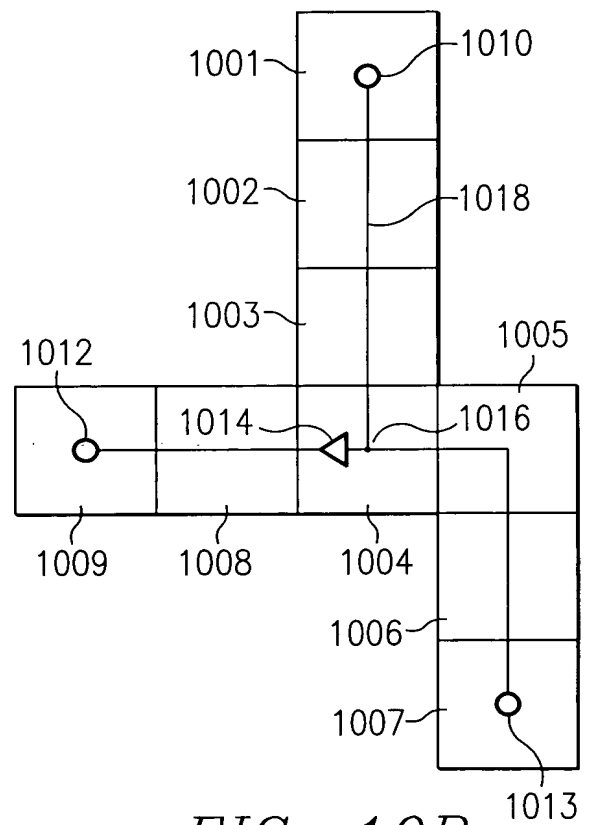
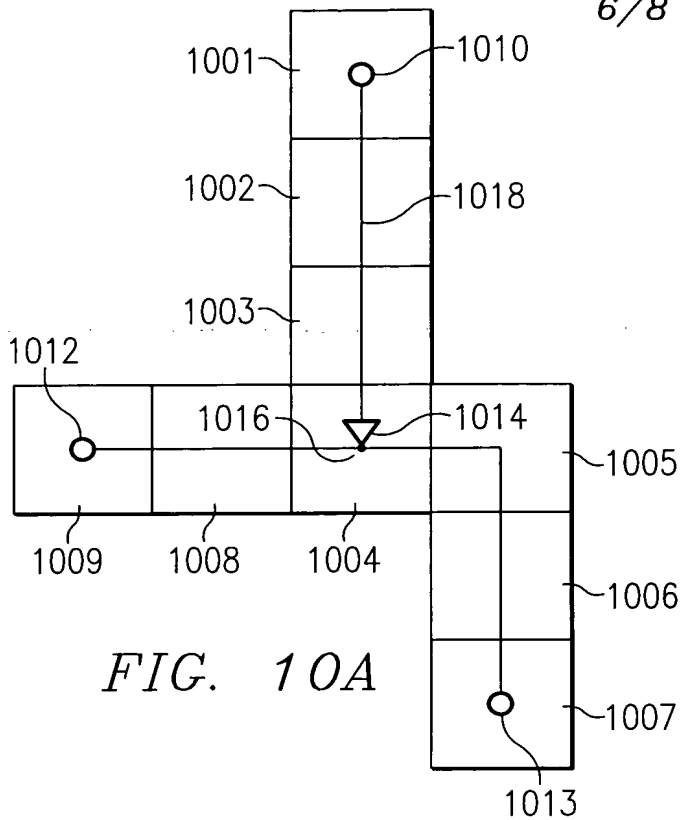


FIG. 10A

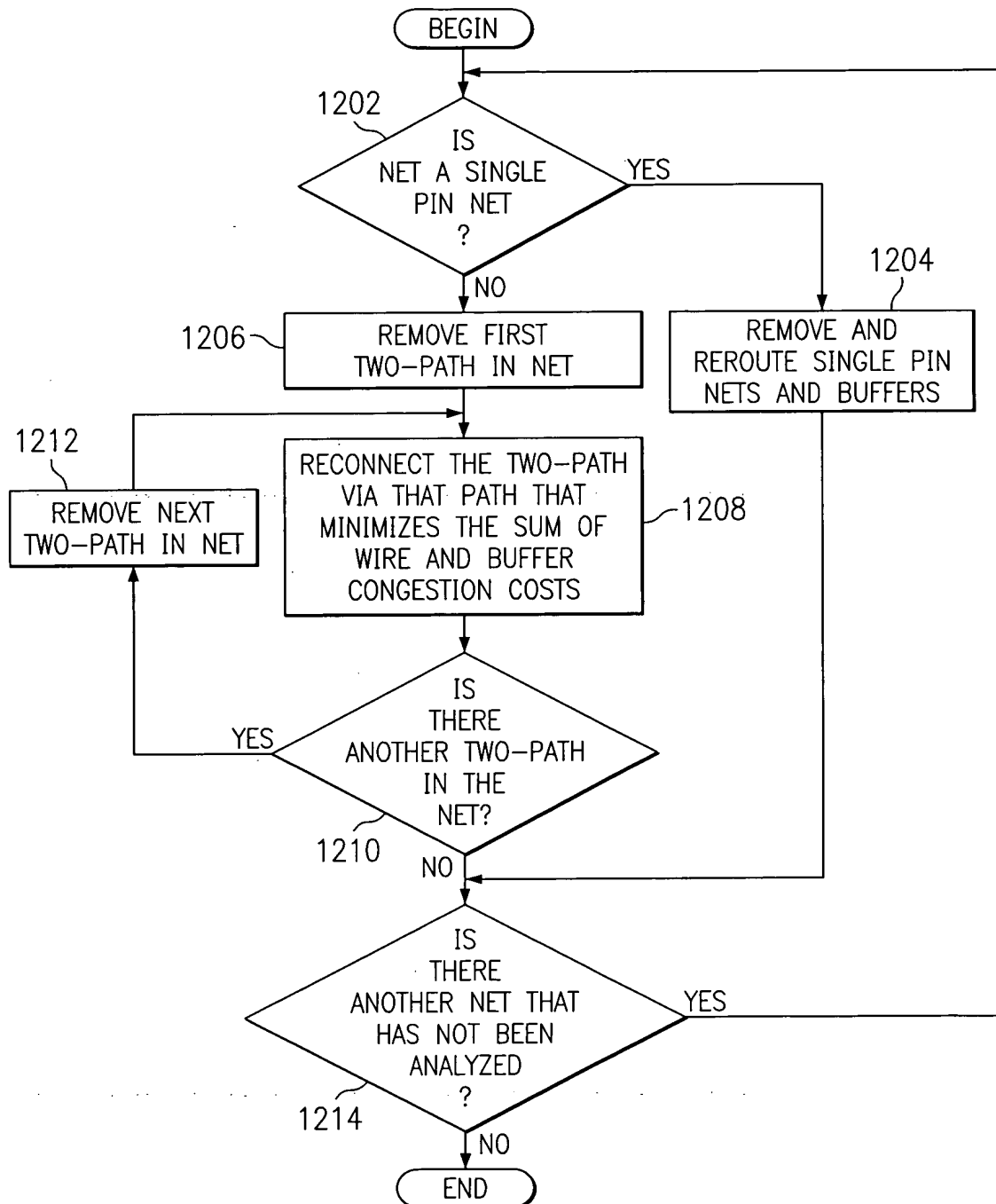
FIG. 11

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1. PICK AN UNVISITED NODE v SUCH THAT ALL DESCENDANTS OF v HAVE BEEN VISITED
WHILE $v \neq s$ DO
2. IF v IS A SINK THEN
SET $C_v[j] = 0$ FOR $1 \leq j < L_i$
3. IF v HAS ONE CHILD $l(v)$ THEN
FOR $j=1$ TO L_i-1 DO
SET $C_v[j] = C_{l(v)}[j-1]$
SET $C_v[0] = q(v) + \min\{C_{l(v)}[j] \mid 0 \leq j < L_i\}$
4. IF v HAS TWO CHILDREN $l(v)$ AND $r(v)$ THEN
 - 4.1 FOR $j=2$ TO L_i-1 DO
SET $C_v[j] = \min\{C_{l(v)}[j_l] + C_{r(v)}[j_r] \mid j_l + j_r + 2 = j\}$
 - 4.2 SET $C_v[0] = q(v) + \min\{C_{l(v)}[j_l] + C_{r(v)}[j_r] \mid j_l + j_r + 2 \leq L_i\}$
 - 4.3 SET $C_v[1] = \infty$
 - 4.4 FOR $j=1$ TO L_i-1 DO
SET $C_v[j] = \min\{C_v[j], q(v) + C_{l(v)}[j-1], q(v) + C_{r(v)}[j-1]\}$
5. MARK v AS VISITED
PICK AN UNVISITED NODE v SUCH THAT ALL DESCENDANTS OF v HAVE BEEN VISITED
6. RETURN $\min\{C_s[j] \mid 0 \leq j < L_i\}$

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FIG. 12



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